

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/627,310	07/25/2003	Cydney C. Brooks	ADY-009	1899
959	7590 11/04/2005		EXAM	INER
LAHIVE & COCKFIELD, LLP.			MITRA, RITA	
28 STATE STREET BOSTON, MA 02109			ART UNIT	PAPER NUMBER
D051011, 112	· · · · · · · · · · · · · · · · · · ·		1653	
			DATE MAILED: 11/04/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/627,310	BROOKS, CYDNEY C.				
Office Action Summary	Examiner	Art Unit				
	Rita Mitra	1653				
The MAILING DATE of this communicatio Period for Reply	n appears on the cover sheet	with the correspondence address				
A SHORTENED STATUTORY PERIOD FOR R WHICHEVER IS LONGER, FROM THE MAILIN  - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communicatic  - If NO period for reply is specified above, the maximum statutory p  - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF THIS COMMUNIFR 1.136(a). In no event, however, may on. period will apply and will expire SIX (6) Mostatute, cause the application to become	NICATION. a reply be timely filed  ONTHS from the mailing date of this communication.  ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	19 September 2005.					
<u> </u>	This action is non-final.					
3) Since this application is in condition for all	lowance except for formal ma	atters, prosecution as to the merits is				
closed in accordance with the practice un	der <i>Ex parte Quayl</i> e, 1935 C	.D. 11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-26</u> is/are pending in the application.						
4a) Of the above claim(s) <u>1-8 and 13-26</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>9-12</u> is/are rejected.						
7) Claim(s) is/are objected to.	• • • • • • • • • • • • • • • • • • • •					
8) Claim(s) are subject to restriction a	and/or election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Exa	miner .					
10)⊠ The drawing(s) filed on 25 July 2003 is/are		ected to by the Examiner				
Applicant may not request that any objection to						
Replacement drawing sheet(s) including the co						
11) The oath or declaration is objected to by the						
Priority under 35 U.S.C. § 119						
	raina ariaribu undar 25 11 C C	C 440(a) (d) a= (f)				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
<u> </u>	<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>					
3. Copies of the certified copies of the		en received in this National Stage				
application from the International B  * See the attached detailed Office action for	,	ot received				
See the attached detailed Office action for	a list of the certified copies he	n received.				
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date.  5) Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date	6)  Other: _					

Art Unit: 1653

#### **DETAILED ACTION**

# Status of the Claims

Applicant's election with traverse of IX in the reply filed on September 19, 2005 is acknowledged. The traversal is on the ground(s) that Group X at least should be rejoined with Group IX because searches of the subject matter of Groups IX and X would be coextensive and there would be no undue burden on the Examiner to search the subject matter of the two groups. This is found persuasive. Accordingly, restriction between Groups IX and X is withdrawn. However, because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement with respect to the other Groups, the remaining election has been treated as an election without traverse (MPEP § 818.03(a)).

The requirement is still deemed proper and is therefore made FINAL.

ane

Claims 1-8 and 13-26 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on September 19, 2005.

Therefore, claims 9-12 are currently under examination.

## Objection to the Specification

Abstract is objected to because of the following informalities:

The abstract should include the steps in the methods of the invention.

The specification is objected to because the specification describes sequences that are set forth in the "Sequence Listing" and embedded in the text of the specification at pages 2, 31, Figure 3, however no reference is made to the sequence by use of the sequence identifier, preceded by "SEQ ID NO:" See 37 C.F.R. § 1.181(d). This objection may be overcome by providing sequence identifier to the embedded sequences.

## Objection to the Claims

Art Unit: 1653

Claims 9-12 are objected to because the claims describe a sequence that is set forth in the "Sequence Listing" and embedded in the text of the specification, however no reference is made to the sequence by use of the sequence identifier, preceded by "SEQ ID NO:" See 37 C.F.R. § 1.181(d). This objection may be overcome by providing sequence identifier to the claims.

# Claim Rejections - 35 USC § 112, Second Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

"The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention."

Claims 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9-12 are indefinite because the abbreviation "FHOS" is not fully spelled out. It is unclear what "FHOS" is. The full spelled out words should precede an acronym/abbreviation.

Claim 12 is indefinite because of the use of the term "portion." It is not clear which portion of the amino acid sequence of FHOS protein, whether it is N-terminal or C-terminal. It is also not clear what is the position of that portion in relation to the amino acid sequence of full length FHOS protein.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Tojo et al. (US 2004/0072742 A1, published April 15, 2004, priority date December 20, 1999). The reference

Art Unit: 1653

teaches a protein or a partial peptide and DNA encoding the same are useful as preventives/remedies for diseases. Tojo et al. also teaches a method of screening a compound that inhibits the binding of said protein and partial peptide to insulin responsive aminopeptidase (IRAP) or to glucose transporter 4 (GLUT4), wherein said compound is used as a preventive /remedy for diseases, e.g., hyperglycemia, diabetes mellitus (see abstract, paragraph 0031 at page 2, 0037 at page 3, 0197 at page 13, 0207 at page 14, 0221, 0224 at page 16, 0492 at page 33), wherein the test compounds are selected from peptides, proteins, non-peptide compounds, synthetic compounds, fermentation products, cell extracts, vegetable extract, animal tissue extracts and blood plasma (see 0226 at page 16, Examples 2, 9, 0493 at page 33). Tojo's protein II includes a human spleen derived protein containing the amino acid sequence of SEQ ID NO: 2, that is highly homologous (substitution of 9 amino acids in the total 1164 amino acids, that is 99.2% sequence identity) to FHOS protein described by Westendorf et al. (Gene, 232, 173-182, 1999, Genbank Accession NO AF113615). See Figures 6-11, 16, 0085 at page 5, SEQ ID NOs: 2 and 4, Examples 2, 9. Tojo's protein is having the structure of the claimed FHOS protein of instant application considered anticipating the binding of the claimed protein to IRAP or GLUT 4 (claims 9, 10, 11). The partial peptide of Tojo is considered for the portion of the FHOS protein of instant application (claim 12). Therefore, claims 9-12 of the instant application are being anticipated by Tojo et al.

#### **Conclusions**

No claims are allowed.

#### Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita Mitra whose telephone number is 571-272-0954. The examiner can normally be reached on M-F, 10:00 am-7:00 pm.

Art Unit: 1653

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rita Mitra, Ph.D.

October 26, 2005